Evidence of Performance

Fire classification of construction products and building elements

Classification report

No.: 15-003747-PR01

(KB-C04-UZ05-en-02)

Client	Hydro Building Systems Germany GmbH Einsteinstr. 61 89077 Ulm (Germany)
Prepared by the notified body	**ift** Rosenheim GmbH Theodor-Gietl-Straße 7-9 D-83026 Rosenheim (Germany)
Notified body No.	0757
Product name	"WICSTYLE 77FP" (as specified by client)
Classification	Classification of fire resistance, smoke leakage and self-closing according to EN 13501-2:2007+A1:2009 / EN 13501-2:2016
Issue No.	3

Fire and smoke control door assembly

Basis

EN 13501-2:2007+A1:2009
EN 13501-2:2016
EN 1363-1:2012
EN 1634-1:2014
EN 1634-3:2004/AC:2006
EN 1191:2012
EN 16034:2014

Instructions for use

This classification report for fire resistance, smoke leakage and self-closing defines the classification assigned to the building element according to its product name in conformity with the methods set out in EN 13501-2. This classification document does not represent type approval or certification of the product.

Validity

This report does not allow any statement to be made on any further characteristics regarding performance and quality of the product presented.

Notes on publication

The **ift** Guidance Sheet "Conditions and Guidance for the Use of **ift** test reports" applies.

Contents

The classification report consists of 13 pages and may only be used or reproduced in its entirety.

1 Introduction
2 Details of classified product
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Classification

EI_2 60
C5
S_a, S_{200}

ift Rosenheim
15.04.2020

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Inspektion – EN ISO/IEC 17020
Zertifizierung Produkte – EN ISO/IEC 17065
Zertifizierung Managementsysteme – EN ISO/IEC 17021

Notified Body 0757
PÜZ-Stelle: BAY 18

ilac-MRA
DAkkS Deutsche Akkreditierungsstelle D-PL-11349-01-00

1 Introduction

This classification report defines the resistance to fire classification assigned to element "WICSTYLE 77FP" in accordance with the procedures given in EN 13501-2.

The element was classified for the first time in the classification report 15-003747-PR01 (KB-C04-01-de-01) dated 20.09.2018.
This is a translation of the third German report 15-003747-PR01 (KB-C04-UZ05-de-03) dated 14.04.2020.

2 Details of classified product

2.1 General

The element "WICSTYLE 77FP" is defined as a type of product single or double leaf fire and smoke control door assembly according to EN 16034.

Its function is to resist fire exposure on one face according to the fire performance characteristics set out in the case of fire in Clause 5 of EN 13501-2 on the opening face or closing face (sections 5.2.2, 5.2.3 and 5.2.4). The closure is capable of closing completely from an open position (Clause 5.2.6). The component has the capability according to Clause 5.2.7 of EN 13501-2 to reduce or eliminate the passage of gas or smoke from one side of the component to the other.

2.2 Description

The element "WICSTYLE 77FP" is fully described in the test reports and in the extended application report in support of classification listed in 3.1.

3 Test reports/extended application report and test results in support of the classification

3.1 Test reports/extended application report

The following test reports, test results and evaluations have been provided to justify this classification.

The client of some test reports is not the client of this report, because of a change of the company name.

Name of laboratory	Name of sponsor	Report ref. no	Test standard and date/field of extend-ed application standards
MPA Braunschweig Body: 0761	Hydro Building Systems Germany GmbH 89077 Ulm (Germany)	3019/8256	EN 1634-1:2000
MPA Braunschweig Body: 0761	Hydro Building Systems Germany GmbH 89077 Ulm (Germany)	3435/688/07	EN 1634-1:2000
MPA Braunschweig Body: 0761	Hydro Building Systems Germany GmbH 89077 Ulm (Germany)	3437/690/07	EN 1634-1:2000
ift Rosenheim Body: 0757	Sapa Building Systems GmbH 89077 Ulm (Germany)	14-000722-PR01 (PB-C05-01-de-03)	EN1634-3:2004
ift Rosenheim Body: 0757	Sapa Building Systems GmbH 89077 Ulm (Germany)	14-000724-PR03 (PB-C05-01-de-03)	EN1634-3:2004
MPA Braunschweig Body: 0761	Hydro Building Systems Germany GmbH 89077 Ulm (Germany)	3151/404/07	EN 1191:2000
ift Rosenheim Body: 0757	Hydro Building Systems Germany GmbH 89077 Ulm (Germany)	15-003746-PR01 (EXAP-C04-UZ05-en-01)	EN 15269-5:2014 + A1:2016 EN 15269-20:2009

3.2 Results

Test report number	Testing laboratory	Client	Test standard
3019/8256 Date: 14.02.2007	MPA Braunschweig Notified body: 0761	Hydro Building Systems Germany GmbH 89077 Ulm (Germany)	EN 1634-1:2000
	Supporting construction	High density rigid construction with a thickness of 175 mm and a raw density of 1000 kg/m³	
	Exposed face	**Closing face**	
	Criteria		**Results**
	E - cotton pad		77 minutes
	E - gap gauge		77 minutes
	E - flame > 10 s		77 minutes
	I_1 - insulation		61 minutes
	I_2 - insulation		77 minutes
	W - radiation max. 15 kW/m²		npd

Test report number	Testing laboratory	Client	Test standard
3435/688/07 Date: 22.02.2008	MPA Braunschweig Notified body: 0761	Hydro Building Systems Germany GmbH 89077 Ulm (Germany)	EN 1634-1:2000
	Supporting construction	High density rigid construction with a thickness of 175 mm and a raw density of 1000 kg/m	
	Exposed face	**Closing face**	
	Criteria		**Results**
	E - cotton pad		68 minutes
	E - gap gauge		70 minutes
	E - flame > 10 s		69 minutes
	I_1 - insulation		52 minutes
	I_2 - insulation		61 minutes
	W - radiation max. 15 kW/m²		npd

Test report number	Testing laboratory	Client	Test standard
3437/690/07 Date: 28.02.2008	MPA Braunschweig Notified body: 0761	Hydro Building Systems Germany GmbH 89077 Ulm (Germany)	EN 1634-1:2000
	Supporting construction	High density rigid construction with a thickness of 175 mm and a raw density of 1000 kg/m	
	Exposed face	**Opening face**	
	Criteria		**Results**
	E - cotton pad		67 minutes
	E - gap gauge		70 minutes
	E - flame > 10 s		67 minutes
	I_1 - insulation		61 minutes
	I_2 - insulation		63 minutes
	W - radiation max. 15 kW/m²		npd

Test report number	Testing laboratory	Client	Test standard
14-000722-PR01 (PB-C05-01-de-03) Date: 10.11.2014	**ift** Rosenheim Notified body: 0757	Sapa Building Systems GmbH 89077 Ulm (Germany)	EN 1634-3:2004
	Supporting construction	Steel frame	
	Exposed face	**Opening face and closing face**	
	Criteria		**Results**
	S_a - smoke leakage at ambient temperature		0.7 $m^3/h/m$
	S_{200} - smoke leakage at 200°C		7.5 m^3/h

Test report number	Testing laboratory	Client	Test standard
14-000724-PR03 (PB-C05-01-de-03) Date: 18.02.2015	**ift** Rosenheim Notified body: 0757	Sapa Building Systems GmbH 89077 Ulm (Germany)	EN 1634-3:2004
	Supporting construction	Steel frame	
	Exposed face	**Opening face and closing face**	
	Criteria		**Results**
	S_a - smoke leakage at ambient temperature		0.8 $m^3/h/m$
	S_{200} - smoke leakage at 200°C		12.5 m^3/h

Test report number	Testing laboratory	Client	Test standard
3151/404/07 Date: 26.05.2008	**ift** Rosenheim Notified body: 0757	Hydro Building Systems Germany GmbH 89077 Ulm (Germany)	EN 1191:2000
	Supporting construction	Low density rigid construction with a thickness of 175 mm and a raw density of 650 kg/m^3	
	Criteria		**Results**
	C - self-closing		200,000 cycles

Element	"WICSTYLE 77FP": Based on the tests performed, resulted the evaluation of the extended application for the for the fire door assembly "WICSTYLE 77FP".		
Extended application report	**Notified body**	**Client**	**Standard**
15-003746-PR01 (EXAP-C04-UZ05-en-01) Date: 14.04.2020	**ift** Rosenheim Notified body: 0757	Hydro Building Systems Germany GmbH 89077 Ulm (Germany)	EN 15269-5:2014 + A1:2016 EN 15269-20:2009

3.3 Validation

The test reports according to older editions of the respective test standards were validated with regard to the currently valid test standards within the extended application report. The results given in 3.2 can be used.

4 Classification and field of application

4.1 Reference for classification

This classification has been carried out in accordance with Clause 7 of EN 13501-2.

4.2 Classification

The element "WICSTYLE 77FP" is classified according to the example of the following combinations of performance parameters and classes as appropriate.

R	**E**	**I**	**W**		**t**	**t**	**-**	**M**	**S**	**C**	**IncSlow**	**sn**	**ef**	**r**	**G**	**K**

Fire resistance classification: EI_2 60-S_a, S_{200}C5

4.3 Field of application

4.3.1 General

This classification is valid for the following end use applications:

EN 16034

4.3.2 Field of direct application as per EN 1634-1

Following configurations of the product are in accordance with the direct application of the test results for the classification under 4.2.

The direct field of applications are based on the aforementioned basic tests. Further transmissions as well as details of the end application are contained in the above-mentioned extended application report. The design details contained therein are not restricted by the following applications.

Reference to standard EN 1634-1	Permitted changes to the tested specimen
13.2.1	Unless otherwise stated in the following text, the materials and construction of the doorset or openable window shall be the same as that tested. The number of leaves and the mode of operation (e.g. sliding, single action or double action) **shall not** be changed.
13.2.2.2	The type of metal **shall not** be changed from that tested.
13.2.2.3	The type of glass and the edge fixing technique, including type and number of fixings per metre of perimeter, **shall not** be changed from those tested. The number of glazed apertures and each of the dimensions (width and height) of glass in each pane included within a test specimen **may be**: - decreased in proportion with size reductions
	The number of glazed apertures and each of the dimensions of glass in each pane included within a test specimen shall not be increased.
	The distance between the edge of glazing and the perimeter of the door leaf, or the distance between glazed apertures shall not be reduced from those incorporated in test specimens. Other positioning within the door can only be modified if this does not involve the removal or re-positioning of structural members relative to the glazing.
13.2.3.1	Decorative surface treatments such as paint coats **are permissible**.
13.2.3.2	Decorative laminates and timber veneers up to 1.5 mm thickness **may be added** to the faces (but not the edges) of doors and frames.
13.2.4	The number of fixings per unit length used to attach doorsets to supporting constructions **may be** increased, but **shall not** be decreased and the distance between fixings **may be** reduced but **shall not** be increased.
13.2.5	The number of hinges and dog bolts may be increased but shall not be decreased. The number of movement restrictors such as locks and latches is not covered by direct application.

Reference to standard EN 1634-1	Permitted changes to the tested specimen
13.3.3.2.1	According to the specifications, the door construction is to be classified in category "A" on the basis of the achieved fire resistance duration with a **test time < 68 minutes**. It is **not** permitted to transfer the test results to doors of the same design, but with larger dimensions than those described and tested in the specimen description. A reduction in size down to 50 % width and 75 % height of the door, while retaining the design and the tested materials, is **permissible**. The functionality of the door **shall be** maintained in its entirety.
13.3.3.2.2	For smaller doorset sizes the relative positioning of movement restrictors (e.g. hinges and latches) **shall remain** the same as tested or any change to the distances between them will be limited to the same percentage reduction as the decrease of test specimen size.
13.3.3.2.3	The rules for variation to tested specimens of side and transom panel arrangements are the same as those applied generally to hinged doorsets.
13.3.3.2.5	The maximum size of the primary gaps is restricted to the following sizes in practice: $x = \frac{(a+b)}{2} + 2$ x is the maximum permitted gap size; a is the maximum measured gap size; b is the mean measured gap size. at top: 13 mm at bottom: 12 mm hinge sided: 13 mm lock sided: 13 mm The minimum size of the primary gaps **may be** reduced.
13.5.2	The fire resistance of the doorset can be applied to a doorset mounted in the same manner as specified in EN 1363-1 in a wall provided the density and the thickness of the wall are equal to or greater than that in which the doorset was tested.

4.3.3 Field of direct application as per EN 1634-3

Following configurations of the product are in accordance with the direct application of the test results for the classification under 4.2.

The direct field of applications are based on the aforementioned basic tests. Further transmissions as well as details of the end application are contained in the above-mentioned extended application report. The design details contained therein are not restricted by the following applications.

Reference to standard EN 1634-3	**Permitted changes to the tested specimen**	**Evaluation and supplements as a result of the test results**
13.1	The results of the leakage test continue to apply to assemblies of a different construction subject to the following:	**permitted**
	a) The assembly is of a similar generic construction, e.g. a solid timber leaf in a timber frame or a folded sheet metal leaf in a steel frame.	**permitted**
	b) The mode of operation is identical, e.g. single swing, double swing, roller shutter or folding leaf.	**permitted**
	c) In the case of assemblies that only require a restriction in the leakage rate from one direction only then the direction does not vary from that tested.	**permitted**
	d) The stiffness of the supporting construction and the method of fixing and sealing the frame to the supporting or associated construction shall not be less than that of the tested construction (this may be the specimen frame in some furnaces). Doors tested in a flexible construction may be installed into rigid constructions but not *vice-versa*. Doors tested in a flexible construction to achieve ambient temperature classification S_a may be installed in alternative flexible constructions. The use of alternative flexible constructions for doors with S_m classification will be the subject of extended application considerations.	**permitted**

Reference to standard EN 1634-3	Permitted changes to the tested specimen	Evaluation and supplements as a result of the test results
13.2.1	Decorative finishes such as paints may be varied.	**permitted**
	The clearance gaps between components may be varied but shall not be greater than those in the tested assembly and where gaps are smaller they shall not impair the ability of the leaf to close, especially in cases where both leaves of hinged or pivoted door assemblies are opened or closed simultaneously.	**permitted**
	Threshold gaps protected by active drop seals may be varied within the movement range specified by the seal manufacturer.	**permitted**
13.3.1.1	The leaf size shall not be increased but may be reduced providing that the number of any movement restrictors such as locks, latches and hinges is not decreased (but may be increased).	**permitted**
13.3.1.2	The aspect ratio of the leaf may be changed, subject to the restrictions in 13.2.2.1 and/or 13.2.2.2 and subject to the length of the leakage path not being extended.	**permitted**
13.4	**Glazing** The type of glass, providing that it has polished or floated surface finish, may be changed, e.g. toughened, laminated, wired or borosilicate, for **ambient temperature** smoke control situations, subject to the edge sealing system being the same. The exchange of alternative textured surface finish glass is subject to extended application evaluation. The type of glass may only be changed for medium temperature smoke control applications by extended application evaluation. The distance between the perimeter of the door and the perimeter of the glazing shall not be reduced. The size of glazed openings may be reduced from that tested and the aspect ratio may be changed providing that no perimeter dimension is increased, and providing that for medium temperature applications the glass type is not changed.	**permitted**

Reference to standard EN 1634-3	Permitted changes to the tested specimen	Evaluation and supplements as a result of the test results
13.5	**Hardware and fittings** Elements of hardware or ironmongery and/or their fixing technique may not be changed without extended application evaluation. The positioning of elements of hardware or ironmongery **may be** modified for **ambient temperature** smoke application but **shall not** be changed for **medium temperature** applications.	**permitted**
13.6	**Seals** As the sealing system is a critical part of the test, no modification may be made to the system tested.	**permitted**

4.3.4 Field of direct application as per EN 1191 and EN 1191, Annex H

Following configurations of the product are in accordance with the direct application of the test results for the classification under 4.2.

The direct field of applications are based on the aforementioned basic tests. Further transmissions as well as details of the end application are contained in the above-mentioned extended application report. The design details contained therein are not restricted by the following applications.

Reference to standard EN 1191	Permitted changes to the tested specimen
6	The results of the test are valid to fillings which are installed in the same way as the tested fillings. In this case, the total weight shall not exceed the weight tested, possibly taking into account an overload.
H.1	The test procedures described in Annex H of EN 1191 apply to manually operated side-hung single and double action pedestrian doorsets being either single leaf or double leaf pedestrian doorsets. Included in this Annex are also pedestrian doorsets in escape routes or fire resisting and/or smoke control pedestrian doorsets or combinations of such pedestrian doorsets, e.g. a fire resisting door being intended for use in an escape route.
H.3.3	Test results of controlled door closing devices with folding arm can be transferred to products with slide rail, if the door closer power size is equal or less and the closer body is in the same position.
H.4.2	The direct range of application as described in EN 1634-1:2008, 13.1 and 13.2, can be applied to the products.
H.4.3	The product's performance is also applicable to smaller and lighter variations of the product.

5 Limitations

This classification document does not represent type approval or certification of the product.

ift Rosenheim
15.04.2020